15-244

PEG Bandwidth

ACCEPTED/FILED

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Federal Communications Commission
Office of the Secretary

April 10, 2015

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Letter in Support of Aviat Networks Request for Waiver of Certain Antenna Requirements in the 71-76 & 81-86 GHz Bands

Dear Ms. Dortch:

On April 5, 2013, Aviat Networks, through its affiliate Aviat U.S., Inc. ("Aviat"), filed a request for partial waiver of Section 101.115 of the Commission's rules to permit use of smaller antennae in the 71-76 and 81-86 GHz bands. Aviat filed an amendment to the waiver request on March 24, 2014. PEG Bandwidth, LLC supports the Commission taking action to grant the relief requested by Aviat to allow for the deployment of fixed microwave systems in the 71-76 and 81-86 GHz bands for wireless backhaul services.

Requests for modifications to the existing antenna requirements for the 71-76 and 81-86 GHz bands have been pending before the Commission since October of 2012.[1] Aviat and the Fixed Wireless Communications Coalition have demonstrated that the technical requirements contained in Section 101.115 of the Commission's rules unnecessarily limit equipment manufacturers from developing and deploying fixed microwave equipment in an effective and efficient manner.[2] In particular, the co-polar discrimination and cross-polar discrimination requirements in Section 101.115 are more stringent than comparable requirements applied to other fixed microwave bands and have inhibited full utilization of the 71-76 and 81-86 GHz bands. No other fixed service band below 71 GHz has any co-polar or cross-polar discrimination requirements and the rules here appear to be based on former technology requirements rather than the current need for small-cell backhaul that the 71-76 and 81-86 GHz bands would enable.[3]

Accordingly, the FCC should grant the Aviat request for waiver of Section 101.115. The waiver would enable parties to make better use of the 71-76 and 81-86 GHz bands. Since 2005, there apparently have been only approximately 5500 links registered nationwide at the

[1] *See* Comments of the Fixed Wireless Communications Coalition in Response to the Commission 's Notice of Inquiry in WT Docket No. 10-153, at 2-6 (filed Oct. 5, 2012).
[2] *See Ex Parte* Presentation of the Fixed Wireless Communications Coalition, WT Docket No. 10-153 (filed April 4, 2013).
[3] *Id.* at 2-3

5904 Stone Creek Drive, Suite 130, The Colony, TX 75056 Telephone: (214) 937-0211

71-76, 81-86, and 92-95 GHz bands.[4] Permitting the use of small, light, unobtrusive antennae in the 71-76 and 81-86 GHz bands will spur more extensive deployment. Because the applications envisioned for the proposed antennae (such as small-cell backhaul) will generally entail short links at low power, the requested waiver will continue to allow dense packing of links and high spectrum efficiency in the bands.[5] PEG Bandwidth, LLC therefore encourages the Commission to take action to grant the requested waiver relief sought by Aviat to permit more effective use of the 71-76 and 81-86 GHz bands.

Respectfully Submitted,

Vijay Lewis
Chief Technology Officer
PEG Bandwidth, LLC

cc: Cheng-yi Liu, Esquire
Jay Birnbaum, Esquire

[4] *Id.* at 3.

[5] The rules require a 2 dB reduction in EIRP for every 1 dB of antenna gain below 50 dBi. 47 C.F.R. § 101.115(b)(2) (table) n.15. The proposed minimum antenna gain of 38 dBi would thus reduce the maximum EIRP by 24 dB. In most applications, the actual power used should be far below the maximum.